

Bering Sea—An Ecosystem Run Amok

BY MICHAEL LEWIS

On the surface of the Bering Sea, the watery interface between Alaska and western Siberia, the scene appears much as it has for the last 10,000 years, when the last great glaciers finally released their waters and buried the land bridge over which humans had crossed to the New World. Shearwaters settle in flocks of thousands on the waves, sea lions throw sparkling droplets in the air as they play with their finny meals, walrus struggle out of the water to sun on their favorite haul-outs.

But beneath the surface of these benificent waters, something sinister is lurking. Some unseen force is turning this once-bountiful ocean ecosystem into an alarming remnant of its former overwhelming diversity. Over the past 20 to 30 years, numbers of key species in the Bering Sea have declined dramatically, in some cases as much as 90%. They are not dying at sea of some unknown disease to wash up on shore in rotting windrows, they are not migrating elsewhere to find new, more desirable habitats. They're just not there anymore.

Alaska Natives were first to notice the change, living, as many still do, on the Earth with the other resident species. They knew, as they have always known, that the balance between the human and animal worlds is delicate and requires constant attention to proper livelihood and respect for their animal neighbors, on whom their lives depend. But now, something was causing the animals to abandon their homes and go elsewhere. Something was disrupting the age-old pact between human and animal; the deal had been called off and it was the human's responsibility to make amends and restore the balance.

The Natives' voices were small and meek when they tried to explain their perspective to the overwhelmingly loud, technologically dominated Europeans who had invaded and taken over their lands and oceans. The Cheechakos would not listen and they continued to exploit the land and the sea.

Factory trawlers, huge floating factory cities, mine the Bering Sea of its pollock, salmon, and yellow-fin sole. Nets as big as apartment houses scoop billions of pounds of fish from the waters and off the bottom every year, meanwhile destroying millions of other animals in the process

and laying waste to the delicately-organized ocean bottom. The noise from these mobile industrial zones can be heard for miles across the water and for scores of miles beneath the surface, disturbing the normal activities of the ancient residents of this bioregion.

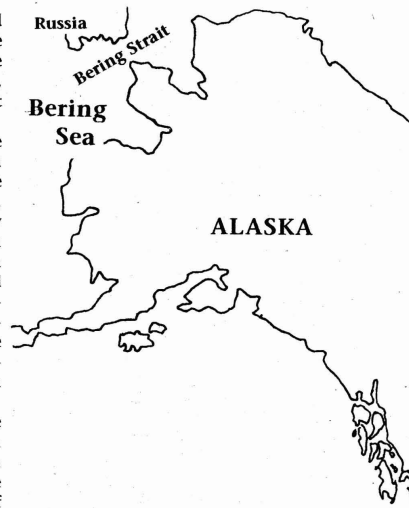
Increasing freighter traffic through these waters leaves an oily scum on the surface from ballast water discharges and small oil spills. The water birds that settle on the surface, their home, find their life-preserving feathers fouled with oily slime, and if they don't die immediately from exposure to the cold waters, they die slowly from secondary poisoning as their accustomed food sources slowly absorb toxic hydrocarbons. Diving ducks are particularly susceptible to entanglement in fish nets, and even though drift nets, the clearcutters of the sea, are supposed to be outlawed, thousands of sea birds continue to drown in these huge plastic traps every year.

Those sea birds that manage to escape the ravaging of their home waters find conditions on land no better. The Yukon-Kuskokwim delta, on the southwest coast of Alaska, was once the nesting grounds of the Steller eider. Hundreds of thousands of these unique sea ducks used to build their nests among the grassy tussocks of this rich coastal plain. Today the Y-K delta is no longer

recognized as a Steller eider nesting zone; the species has been extirpated (a word as ugly as its meaning) from this bioregion. Steller Eiders winter along the Alaska Peninsula. Of the 250,000 to 500,000 eiders that used to be seen in this area, only 50-75,000 remain, mostly from nesting grounds in Siberia. A pitiful 300-500 remaining individuals are now known to nest in Alaska on the North Slope.

A close relative, the spectacled eider, has declined over 90% in numbers on the once-lush Y-K delta. European scientists don't know where these animals winter, but the natives say they go to the bottom of the ocean and burrow into the Earth where it is warmer. Evidently, many of them have decided not to return.

In a related mystery, the Steller sea lion has been drastically declining in numbers for the last ten years. From a population estimated at 140,000 in 1958, their numbers have crashed to 25,000 today, and the population is still declining at 5% per year. Again, no disease is ravaging



these animals, migration doesn't account for their loss. But haul-outs that once groaned under the weight of thousands of sea lion adults and pups are now virtually deserted. Biologists do not admit to an understanding of the cause for this decline, and though the Stellers are now on the Threatened Species list, little can be done to reverse this drastic change until the cause is determined.

Though life in and on the Bering Sea is normally abundant and diverse, this seeming fecundity is deceptively shallow and fragile. Life in the arctic is delicately balanced, constricted by cold and short growing seasons, even in relatively mild coastal bioregions. The same ecological interrelationships exist as in lower latitudes, but here they are stressed to the limit by the prevailing climate.

In the Lower 48, scientists have determined that, in general, a species can tolerate a 10% "harvest" rate and still maintain a healthy breeding population. This rate of killing plants and animals for human use is called a "sustained yield." All "resource" exploitation in the north has been predicated on this same sustained yield rate, with no additional studies being done to determine its suitability in northern latitudes.

As you might guess by common sense, the delicately balanced ecosystems of the Arctic and sub-Arctic cannot sustain anywhere near this rate of destruction. Biologists estimate that most animal and plant species in Arctic bioregions can tolerate, at most, a 3 to 5% "harvest" (another ugly word) rate. There is very little redundancy in Arctic ecosystems, where energy conservation is

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Steller's Sea Cow

Extinct since 1768

Suit Threatened Over Imperiled Eiders

Recently the Biodiversity Legal Foundation (BLF) filed a formal 60-day notice of intent to file suit against the Interior Department for its failure to list and protect the spectacled and Steller's eider in Alaska under the Endangered Species Act. The Steller's and spectacled eiders are small marine ducks that winter and breed at northern latitudes far away from most human populations. Their breeding areas are the Yukon Delta, a relatively pristine waterfowl breeding area in western Alaska, the Arctic Coastal Plain of Alaska, and eastern Siberia. Both species have experienced serious and dramatic declines in numbers in recent years.

A petition to add the spectacled and Steller's eiders to the growing list of threatened and endangered species was submitted to the US Fish and Wildlife Service in 1990 by James G. King of Juneau, Alaska. The Service is required by law to accept or reject such a petition within one year, but to date has not done so. This latest legal action is designed to compel the government to act. If the petition is rejected, further litigation is possible by the Biodiversity Legal Foundation

and other environmental groups.

The Biodiversity Legal Foundation recognizes that the specific reasons for spectacled and Steller's eider declines are unknown. However, possible contributing factors include predation, habitat change, over-harvest, weather, ecosystem and atmospheric contamination, and changes

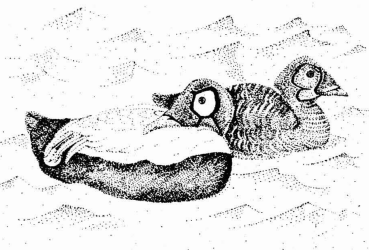
in patterns of movement. Some of these factors may be the result of the cumulative impact of human activities in the Alaskan Arctic.

The ESA listing of these two eiders would result in badly-needed increased funding for research to tease apart which factors are most responsible for their decline. It would also give agency officials legal authority to better monitor and control the direct, human-caused mortality of these eiders and to work for the protection of the marine ecosystems and nesting areas upon which the existence of these species depends.

Time is running out for these small marine ducks. By listing and protecting them now under the ESA, a needed national effort will be initiated to address the severity of the current rate of decline and develop effective recovery plans.

Unless the FWS acts immediately to list the spectacled and Steller's eider as threatened or endangered species, the BLF will exercise its right to bring an action in federal district court to compel the FWS to meet its statutory obligations under the ESA, 15 USC §1540(g)(1).

—BIODIVERSITY LEGAL FOUNDATION



Spectacled Eider

Peggy Sue McRae

maximized in all species, including wild humans, and there is very little room left for excess production.

It should come as no surprise then, when commercial fish processors remove 3 billion pounds of fish every year, that changes begin to appear in this delicate ecosystem. Commercial fishing by huge factory trawlers in the waters off Alaska selectively removes the largest fish from the population, leaving fish from 1" to 10" in length. This disrupts the predator-prey relationships, favoring those predators who depend on the smaller fish. In a system like that of the Bering Sea, the effect is similar to dropping a bowling ball into an aquarium. The combination of commercial fishing with its attendant disruption of population dynamics, plus the noise, water and air pollution and ocean bottom destruction that comes along with this commercialization of what once was a low level, subsistence activity, has proven devastating to the entire bioregion of the western coast of Alaska. The Bering Sea is indeed an ecosystem run amok.

Biologists express puzzlement over these declines, unable to pin down any system-wide influences on population dynamics. Consequently, Natives are beginning to demand that the European scientific establishment begin to pay more attention to their traditional knowledge and observations of the Bering Sea ecosys-

tem, a knowledge based on thousands of years of close cooperation with animals of this bioregion. Representatives of western Alaska coastal villages have formed a statewide marine mammal coalition "to promote traditional knowledge as a complement to the scientific method used by university and government researchers."

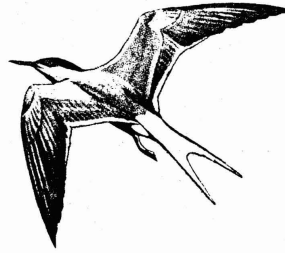
Despite the earnest efforts of natives and the ignorance of western scientists, the problem in coming to terms with environmental disruption caused by human activity is not one of scientific realities as much as recognition of political influence. Commercial fishing in Alaska is a huge economic enterprise, benefitting not so much individual fishermen as fat capitalist investors who own the factory trawlers that plow the waters of the Bering Sea. The multi-billion dollar fishing industry packs a big wallop in the halls of Washington DC, where lobbyists heavily influence Alaska's so-called representatives. The result is that policy in such agencies as the US Fish and Wildlife Service and the Northwest Fisheries Management Council is generated by greed rather than ecological reality. The field biologists working in Alaska and even their immediate managers are fully aware of the nature of

the problem and the steps necessary to rectify the situation. But their recommendations are forwarded to Washington, where other considerations take precedence.

Only one thing is certain in this war waged by commercial greed against the ancient inhabitants of Alaska and the Arctic: unless something is done very soon to stop the precipitous decline of animal species in the Bering Sea, the spectacled eider, the Steller's eider and the Steller sea lion will join the list of species no longer endangered. They will be extinct.

What you can do: 1) Write to officials at the USFWS and, of course, your congresspeople, and let them know how you feel about destruction of delicate ecosystems for commercial gain. There aren't enough concerned people in

Alaska to gain notice in Washington. 2) Visit these officials and demand they snap out of it and face facts and start fixing things, instead of breaking them. 3) Acquire a large boat and fix things yourself. Go ahead, do it your way.



Forest Service Lies! Announcing A Day of Outrage against the US Forest Service! *The Time is Now to End All Logging On Our National Forests*

1991 was the official 100th anniversary of the US Forest Service, but no one is celebrating. Our US Forest Service is destroying forests twice as fast as Brazil is. And while 80 percent of Brazil's rain forest still stands, at current rates, the unprotected remnants of America's forests could be completely fragmented and gone in fewer than ten years. It is time to put the Forest Service out of business and let our forests live.

We are calling for a national Day of Outrage on John Muir's Birthday, April 21. Earth First!ers from around the country will take action, sing and shout, perform pagan rites at Forest Service headquarters, Congressional offices or in the forests! Our mission is no less than to reintroduce wolf, griz, and all extirpated species to the national forests, to completely restore timber-raped land; to end mining, grazing, logging and all human vampire sucking of resources from our fragile forests.

Day of Outrage?, you say; we've been outraged at the US Forest Service for years! True enough, yet amazingly, there may still be citizens in the land who don't know of the outlaw ways of the agency, who still think Smokey the Bear's job is to protect the trees and forest creatures, not to murder the forests by handing them over to clearcutting, corporate fiends!

More than one million acres a year are being brutally clearcut. In the process, 360,000 miles of roads have been built in the forests. No other government or government agency in the world is responsible for such a huge road system. Over \$2 billion a year in taxpayers' money is spent building and maintaining logging roads and cleaning up after logging operations. Timber companies pay less than \$400 million a year for the trees, meaning they receive over \$1.5 billion worth of free services to help them ravage public land. The US Forest Service administers this huge welfare program for the timber industry, while covering up the losses with accounting schemes which "make the savings and loan business look like an angel," according to one investigator.

The abuses of the USFS have gotten so bad, even the mainstream media has noticed. A New York Times headline (Nov. 3, 1991) asks "Why Let Chainsaws Pare the Old Forests At All?" In an article in the October, 1991, issue of *Atlantic Monthly*, the author calls for a complete halt to all logging in the National Forests, restoration of land damaged by clearcutting and tree farming, and management of the National Forests exclusively for recreation and the maintenance and enhancement of biodiversity.

The forests of the generations are dying, while environmental bureaucrats lobby politicians paid off by the timber industry. They beg for tree museums, called Ancient Forest Preserves. Election year vagaries may or may not allow legislation to happen. As Congress twiddles its thumbs, the forests continue to fall. No matter what, legislation will be a compromise, with lines of protection drawn by political interests, not with respect for a healthy forest.

Public awareness is growing, but it won't be enough to save forest ecosystems unless we can transform awareness to Outrage. The 100 years of Forest Service reign has been one of rape and ruin. The National Forest is dying from their lies. Please join with other Earth First! activists around the country and get out in the street, the woods or the deserts to make Muir Day a rowdy, outrageous and effective Day of Outrage.

Together we have a stronger message and a louder voice. Let's take action together on April 21 and honor John Muir and his message.

Start planning your local group action now. A coordinating group in the SF Bay Area is putting together an action packet. The packet will include news clips, info sheets, artwork, media info and other ideas to help you pull off a successful action. If you have ideas, materials or artwork that would be appropriate for the packet please get in touch with us as soon as possible! To get the packet or contribute materials, write to Earth First! Day of Outrage, P.O. Box 410041, San Francisco, CA 94141. The phone number is (415) 921-3578. MARK APRIL 21 ON YOUR CALENDAR AND GEAR UP!

Also: We need more creative ideas! Join the committee working on this if you can help!

—KAREN PICKETT

